A METHOD AND APPARATUS BASED ON COMBINATION OF PHYSIOLOGICAL
PARAMETERS FOR ASSESSMENT OF ANALGESIA DURING ANESTHESIA OR SEDATION
Inventor(s): Ilkka Korhonen et al.
Appln. No. 10/614,749

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FIG. 1

FIG. 2

FIG. 3

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FIG. 4

FIG. 5A

FIG. 5B

FIG. 5C

FIG. 5D

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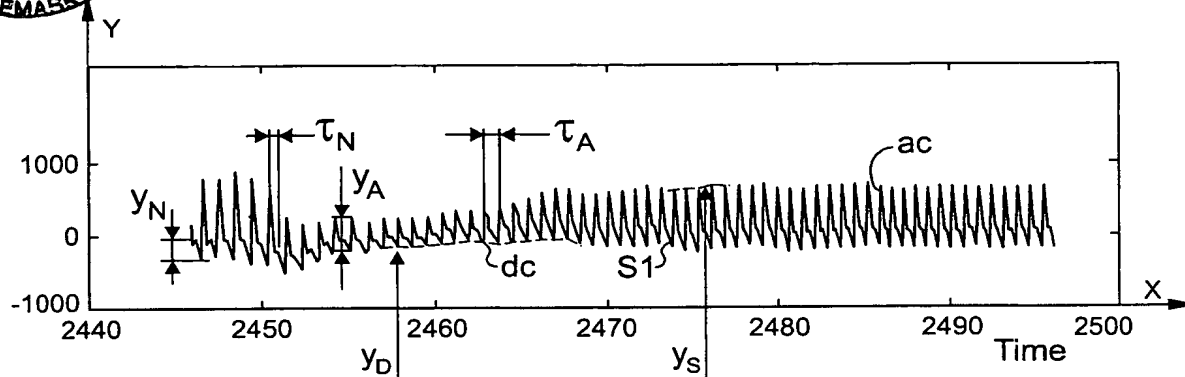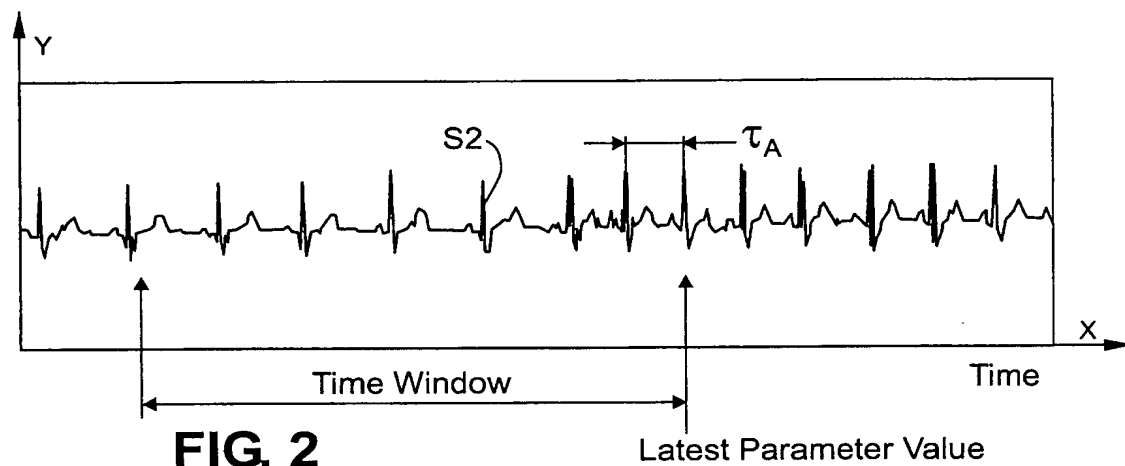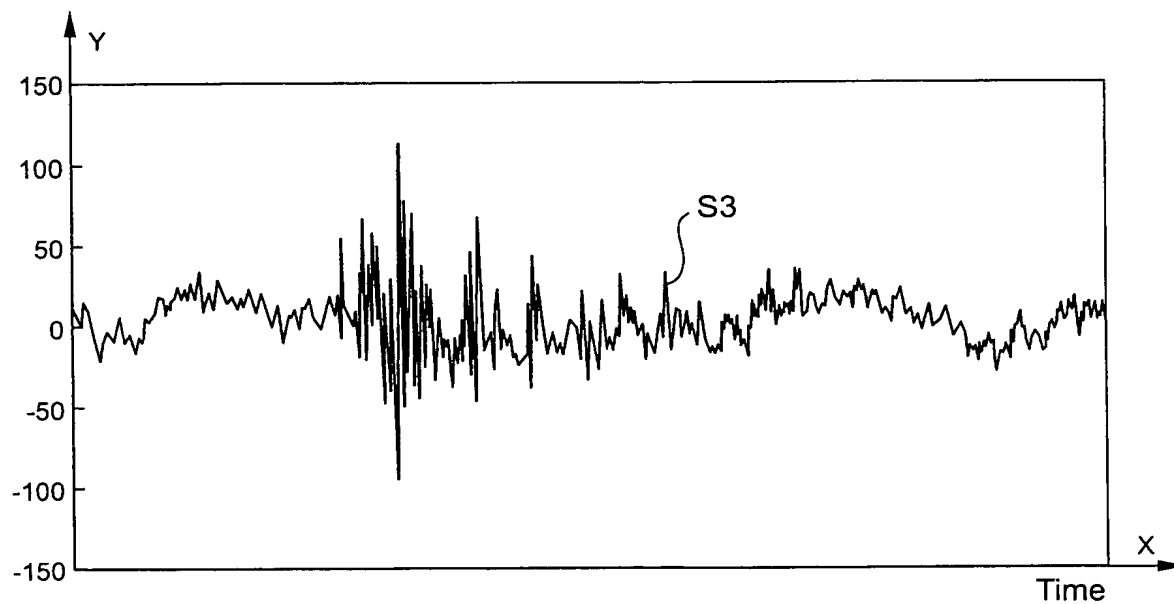Appln. No. 10/614,749

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Acquiring First Signal (S1)

Deriving First Parameter (Y) Value

Deriving Second Parameter (X) Value

Parameter Values from Time Window

Parameter Values from Time Window

Calculating Changing Mathematical Indexes (P) for Probability

Indicating Successive Indexes

FIG. 6

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```
   ┌──────────────────┐          ┌──────────────────┐
   │ Acquiring First  │          │ Acquiring Second │
   │ Signal (S1)      │          │ Signal (S2)      │
   └──────────────────┘          └──────────────────┘

   ┌──────────────────┐          ┌──────────────────┐
   │ Deriving         │          │ Deriving         │
   │ First Parameter  │          │ Third Parameter  │
   │ (Y) Value        │          │ (T) Value        │
   └──────────────────┘          └──────────────────┘

┌──────────────────┐                        ┌──────────────────┐
│ Parameter Values │                        │ Parameter Values │
│ from Time Window │                        │ from Time Window │
└──────────────────┘                        └──────────────────┘
          ┌───────────────────────────┐
          │ Calculating Changing      │
          │ Mathematical Indexes      │
          │ (P) for Probability       │
          └───────────────────────────┘

              ┌────────────────┐
              │ Indicating     │
              │ Successive     │
              │ Indexes        │
              └────────────────┘
```

FIG. 7

A METHOD AND APPARATUS BASED ON COMBINATION OF PHYSIOLOGICAL
PARAMETERS FOR ASSESSMENT OF ANALGESIA DURING ANESTHESIA OR SEDATION
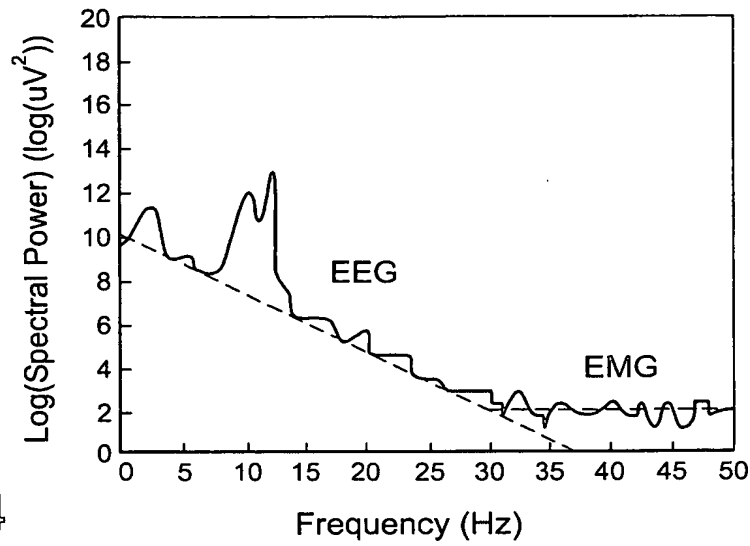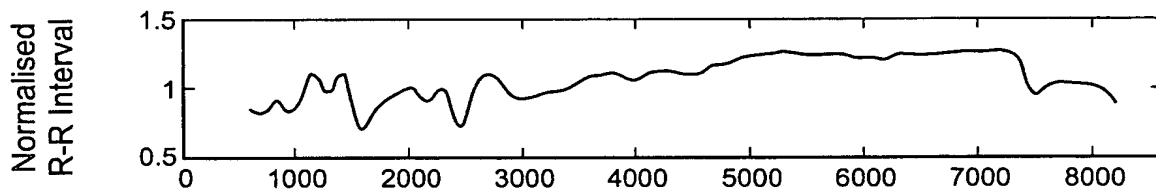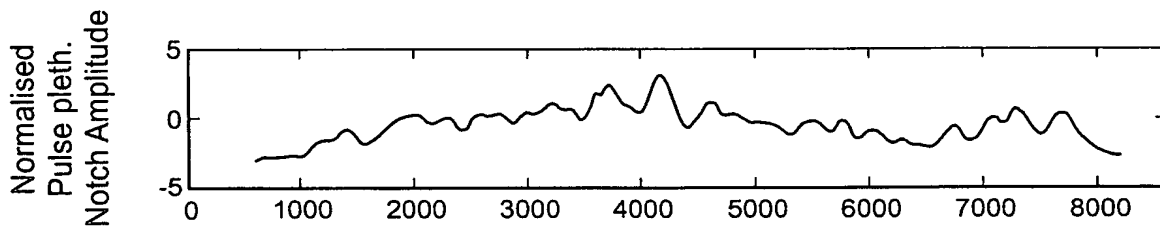Inventor(s): Ilkka Korhonen et al.
Appln. No. 10/614,749

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```
┌─────────────────┐        ┌─────────────────┐
│ Acquiring First │        │ Acquiring Third │
│ Signal (S1)     │        │ Signal (S3)     │
└─────────────────┘        └─────────────────┘

┌─────────────────┐        ┌─────────────────┐
│ Deriving        │        │ Calculating     │
│ First Parameter │        │ Fourth Parameter│
│ (Y) Value       │        │ (E) Value       │
└─────────────────┘        └─────────────────┘

┌─────────────────┐    ┌────────────────────┐    ┌─────────────────┐
│ Parameter Values│    │ Calculating Changing│    │ Parameter Values│
│ from Time Window│    │ Mathematical Indexes│    │ from Time Window│
└─────────────────┘    │ (P) for Probability │    └─────────────────┘
                       └────────────────────┘

                        ┌─────────────────┐
                        │ Indicating      │
                        │ Successive      │
                        │ Indexes         │
                        └─────────────────┘
```
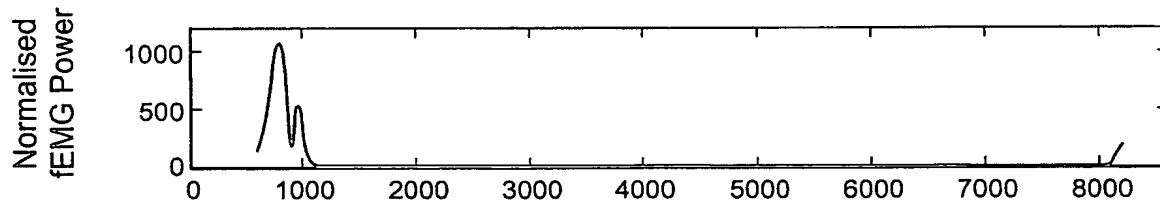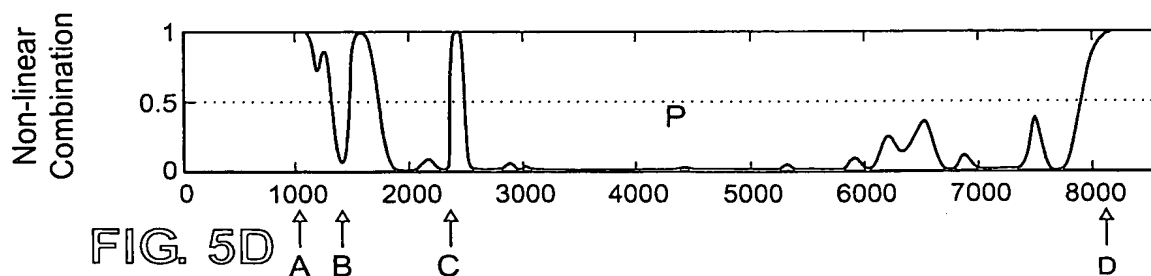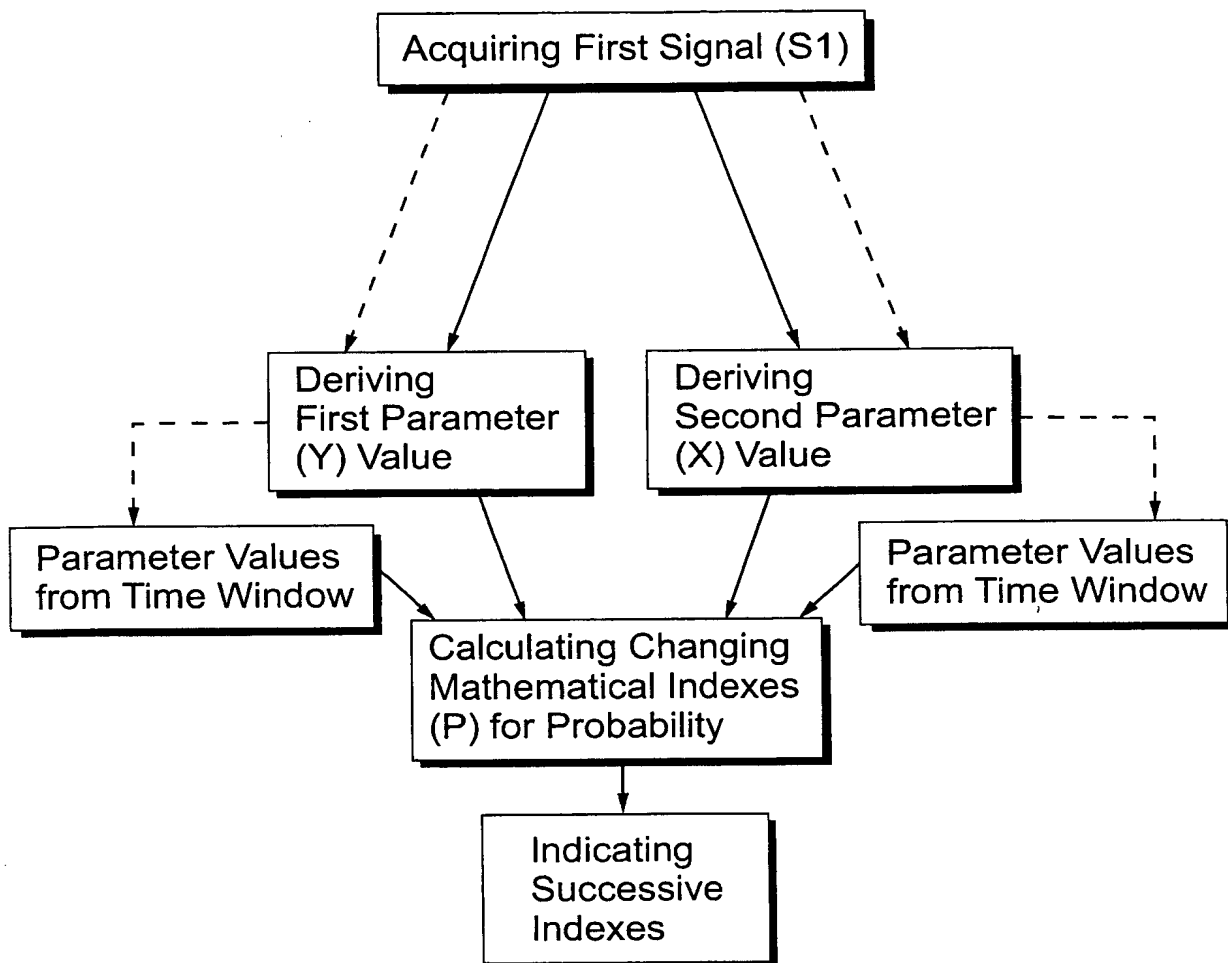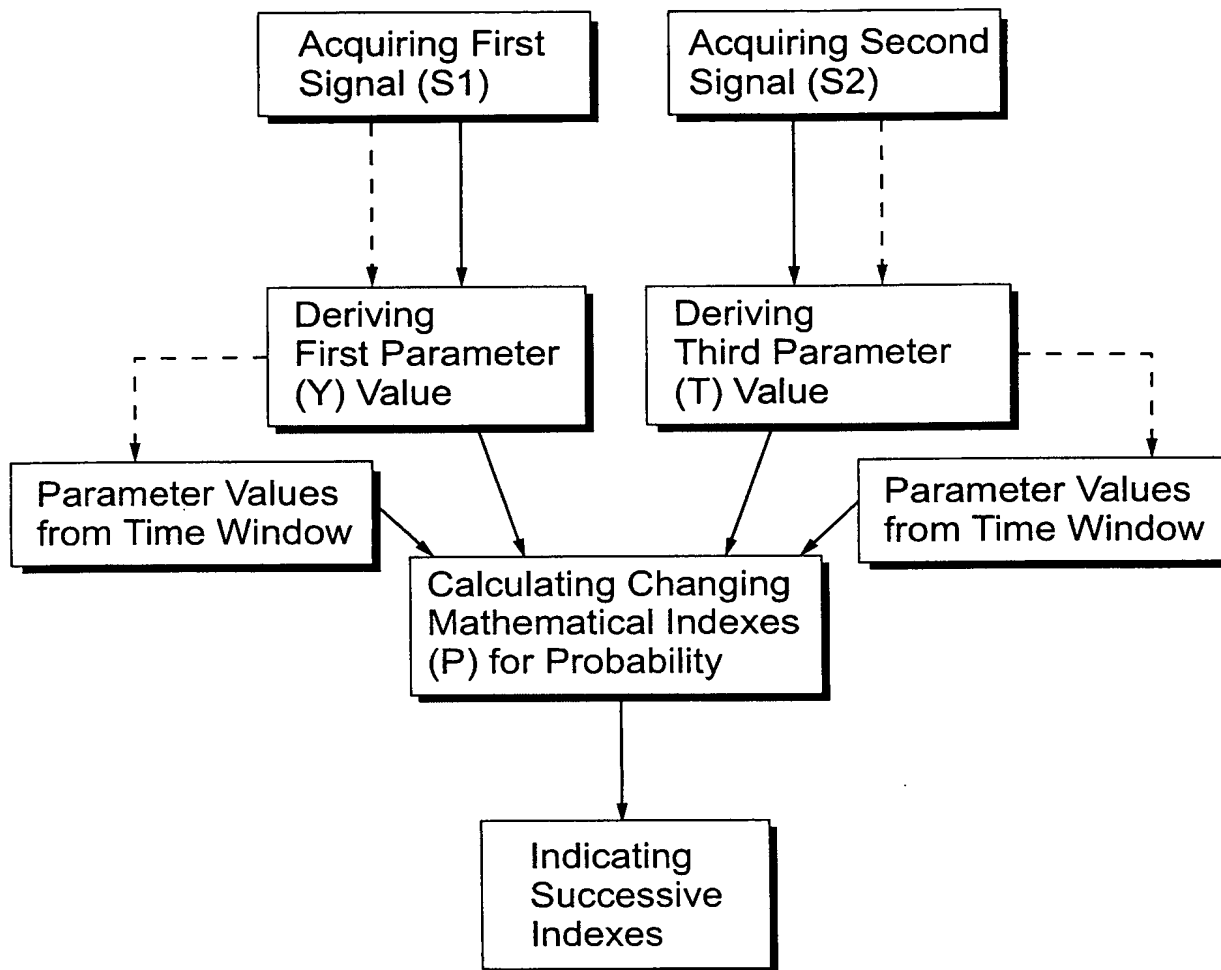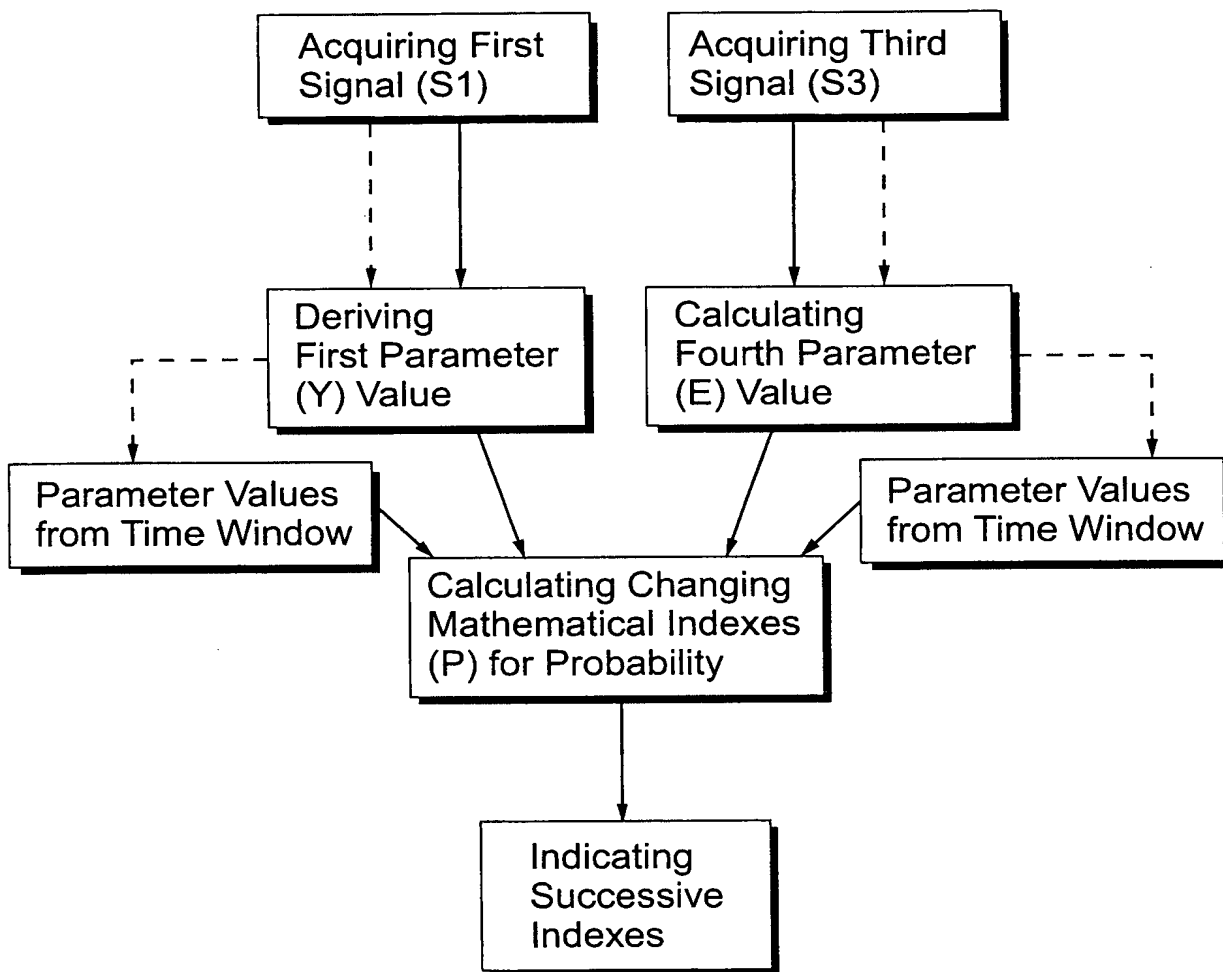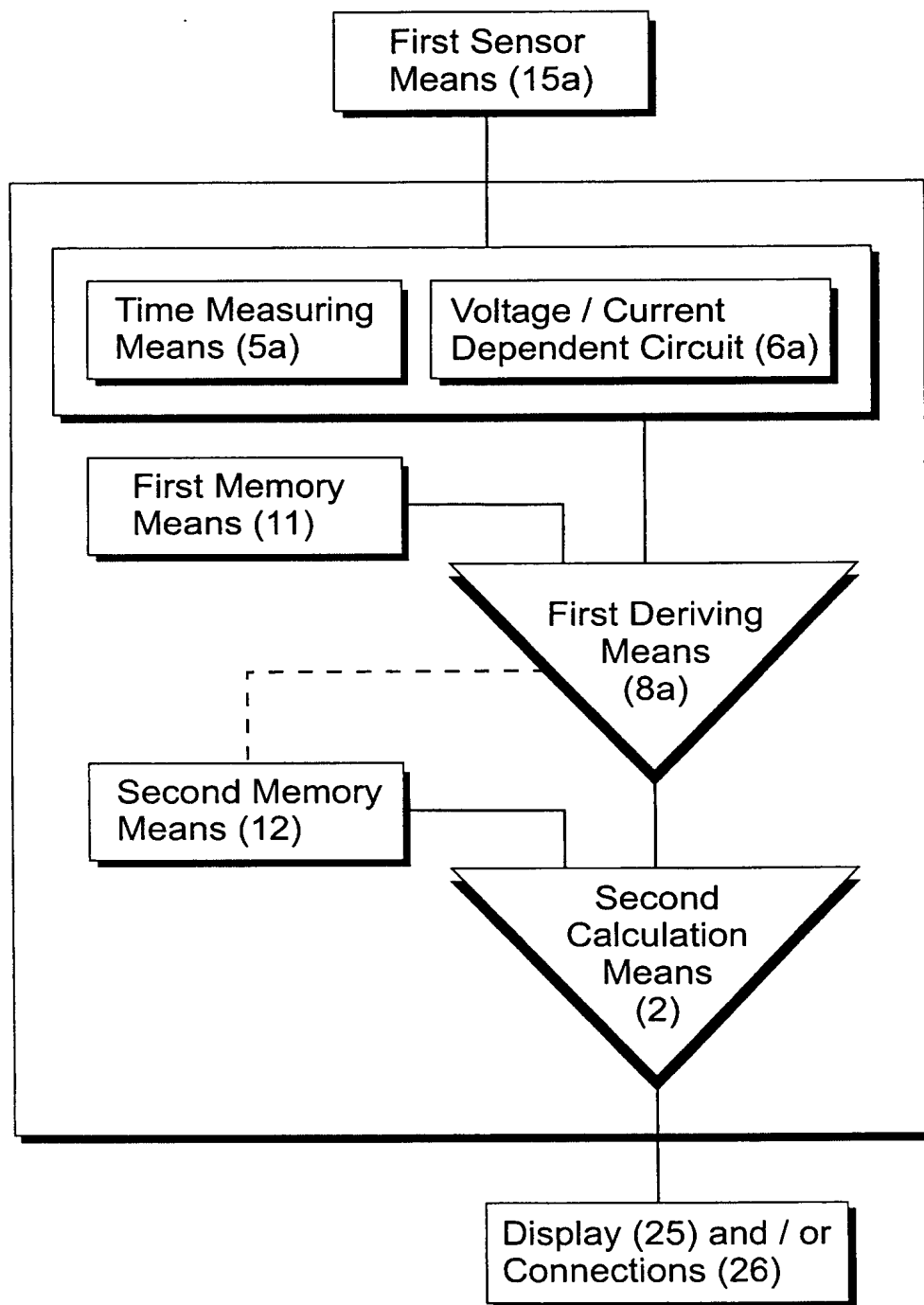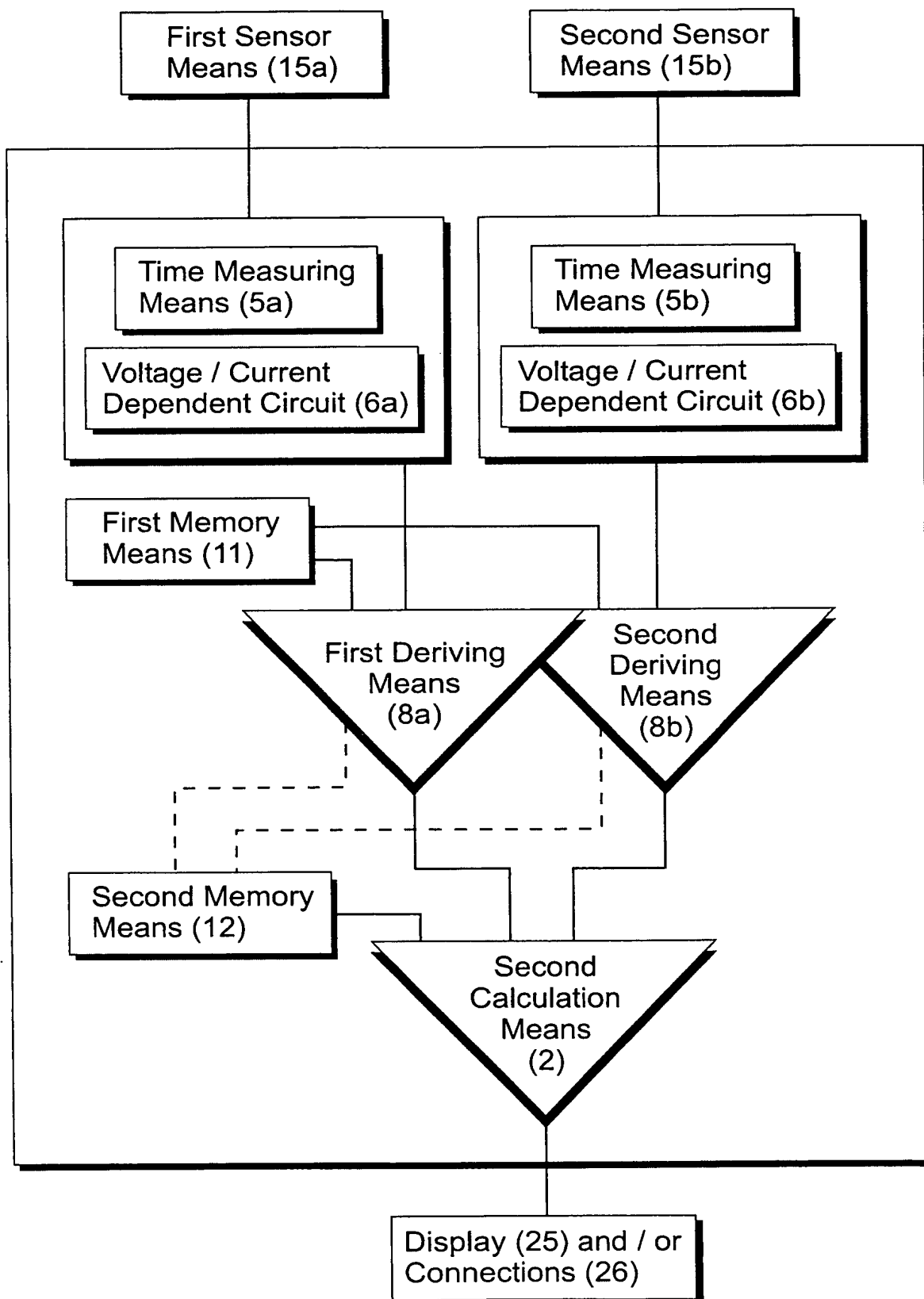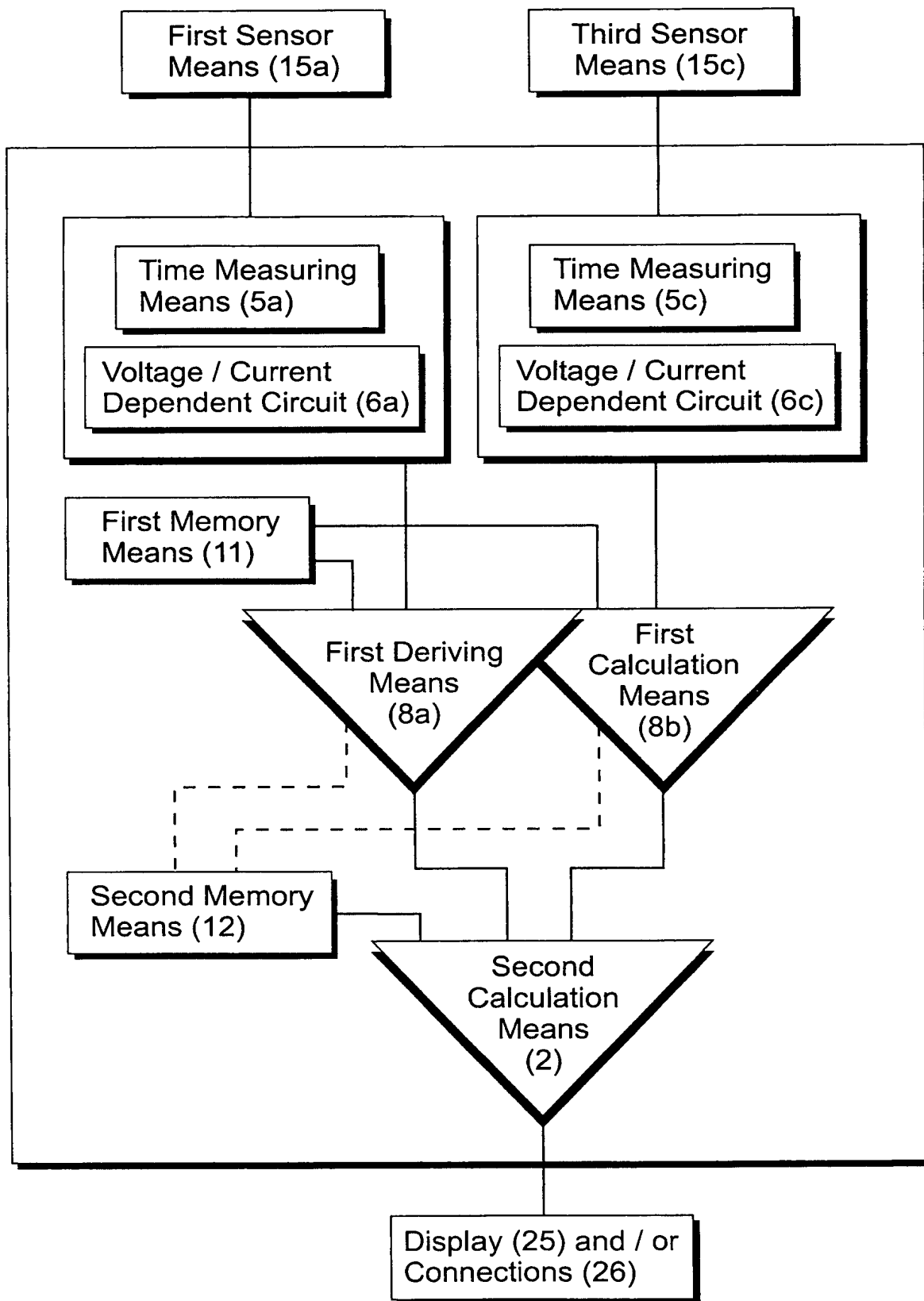
FIG. 8

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FIG. 9

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FIG. 10

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FIG. 11